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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/20/2001

Ragulan Sinnarajah

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04/15/2004

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

TRINH, TAN H

ART UNIT

PAPER NUMBER

2684

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DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,978

Applicant(s)

SINNARAJAH ET AL.

Examiner

TAN TRINH

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-11 and 19 is/are rejected.
- 7) ☒ Claim(s) 12-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 12-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for allowed

Regarding claim 12, the prior art of record fail to teach or suggest, the method as claimed in claim 11 wherein said determining a status of the subscriber station's paging set comprises: receiving at a subscriber station a HSBS channel modulating a first frequency; monitoring at a subscriber station a timer status for the HSBS channel, and if the timer status is expired, then: performing a broadcast service registration with a sector transmitting the HSBS channel; setting status of the timer for the HSBS channel to enabled; and starting a first timer for the HSBS channel; receiving at the sector the broadcast service registration from the subscriber station; adding at the sector a paging identifier to the subscribers' station paging set; starting at the sector a second timer for the paging identifier; monitoring at the sector a timer status of all paging identifiers for all subscriber stations' paging sets, and if a timer status of a paging identifier for a subscriber station is expired, then removing the paging identifier from the subscriber's station paging set.

In addition, the prior art of record fail to teach or suggest, the method as claimed in claim 11 wherein said determining a paging channel on which to page the subscriber station in accordance with the determined status of the subscriber station's paging set comprises: determining frequencies on which to page the subscriber station in accordance

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with paging identifiers contained in the subscriber station paging set; determining paging channels on which to page the subscriber station for each of the frequencies; and paging the subscriber station on all determined paging channels, as cited in claim 13.

And method as claimed in claim 11 wherein said determining a status of the subscriber station's paging set comprises: transmitting from the subscriber station a first notification of a desire to receive a broadcast channel; transmitting from the subscriber station a second notification a desire to cease broadcast channel reception; adding a paging identifier to the subscriber station paging set upon receiving the first notification; and removing the paging identifier from the subscriber station paging set upon receiving the second notification, as cited in claim 14.

In addition, the prior art of record fail to teach or suggest, the method as claimed in claim 11 wherein said determining a status of the subscriber station's paging set comprises: transmitting from the subscriber station a notification of a desire to receive a broadcast channel modulating a second frequency different from the first frequency monitored by the subscriber station; removing an identifier of the first frequency from the subscriber station paging set upon receiving the notification; and adding an identifier of the first frequency to the subscriber station paging set upon receiving the first notification, as cited in claim 16.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang (U.S. Patent No. 6,681,114).

Regarding claim 6, Chang teaches a method for a subscriber station registration in a broadcast communication system (see fig. 3, col. 1, lines 50-56), comprising: receiving a broadcast service registration from the subscriber station at a sector (see col. 2, lines 31-38); adding a paging identifier to the subscribers' station paging set (see col. 8, lines 34-55); and starting a timer for the paging identifier (see figs. 8-9, col. 8, lines 11-23).

Regarding claim 7, Chang teaches monitoring a timer status of all paging identifiers for all subscriber stations' paging sets (see col. 8, lines 34-55), and if a timer status of a paging identifier for a subscriber station is expired (see figs. 8-9, col. 8, lines 11-23), then removing the paging identifier from the subscriber's station paging set (see fig. 10, col. 9, lines 34-39).

Regarding claim 8, Chang teaches adding an identifier for the frequency that the subscriber station monitors upon power-up to the subscribers' station paging set (see col. 2, lines 39-43).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. Patent No. 6,681,114) in view of Witkowski (U.S. pub. No. 20040048622).

Regarding claim 1, Chang teaches a method for a subscriber station registration in a broadcast communication system (see fig. 3, col. 1, lines 50-56), comprising: receiving a broadcast channel modulating a first frequency (see col. 1, lines 51-61, col. 2, lines 31-38); and monitoring a timer status for the broadcast channel (see fig. 8, col. 8, lines 11-24), and if the timer status is expired: performing a broadcast service registration with a sector transmitting the broadcast channel (see fig. 8, col. 8, lines 11-24); setting status of the timer for the broadcast channel to enabled (see col. 8, lines 11-23); and starting a timer for the broadcast channel (see col. 8, lines 11-23). But Chang fails to teach high-speed data broadcast or HSBS.

However, Witkowski teaches high-speed data broadcast (see page 2 sessions [0020])

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Chang system and by the providing of the teaching of Witkowski with high speed data broadcast thereto in order to provide user to enable information of the broadcast or displayed in user's electronics systems.

Regarding claim 2, Chang teaches the transmitting a paging identifier to the sector (see col. 3, lines 45-49 and col. 8, lines 34-56).

Regarding claim 3, Chang teaches transmitting an identifier of the broadcast channel monitored by the subscriber station to the sector (see col. 5, lines 15-20 and lines 62-67, col. 2, lines 31-38 and col. 8, lines 34-55).

Regarding claim 4, Chang teaches transmitting an identifier of the frequency monitored by the subscriber station to the sector (see col. 5, lines 15-20 and lines 62-67).

Regarding claim 5, Chang teaches setting timer status to expired for all broadcast channels upon power-up of the subscriber station (see col. 2, lines 39-43).

Regarding claims 9 and 10, Chang teaches adding an identifier of the broadcast channel monitored by the subscriber station to the subscribers' station paging set (see col. 8, lines 34-55). But Chang fails to teach high-speed data broadcast or HSBS.

However, Witkowski teaches high-speed data broadcast (see page 2 sessions [0020])

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Chang system and by the providing of the teaching of

Witkowski with high speed data broadcast thereto in order to provide user to enable information of the broadcast or displayed in user's electronics systems.

6. Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. Patent No. 6,681,114) in view of Johnson (U.S. Pub. No. 20030165155).

Regarding claim 11, Chang teaches a method for paging a subscriber station in a broadcast communication system (see fig. 3), comprising: determining a status of the subscriber station's paging set (see col. 8, lines 34-55); But Chang fails to teach the determine paging channels on which to page the subscriber and paging the subscriber station on all determined paging channels.

However, Johnson teaches the determine paging channels on which to page the subscriber and paging the subscriber station on all determined paging channels (see fig. 1, page 3, session [0036] and session [0053]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Chang system and by the providing of the teaching of Johnson with paging channel technique thereto in order to have paging the subscriber station on all determined paging channels.

Regarding claim 19, Chang teaches a method for paging a subscriber station in a broadcast communication system (see fig. 3, col. 1, lines 50-56), comprising: determining a frequency that the subscriber station monitors upon power-up (see col. 2, lines 39-45); determining all frequencies modulated by broadcast channels (see col. 2, lines 27-38); But Chang fails to teach the determining paging channels on which to page the subscriber

station for each of the frequencies; and paging the subscriber station on all determined paging channels.

However, Johnson teaches the determining paging channels on which to page the subscriber station for each of the frequencies; and paging the subscriber station on all determined paging channels (see fig. 1, page 3, session [0036] and session [0053]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Chang system and by the providing of the teaching of Johnson with paging channel technique thereto in order to have paging the subscriber station on all determined paging channels.

Response to Arguments

7. Applicant's arguments with respect to claims 1-17 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (703) 305-5622.

The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

Tan H. Trinh
Art Unit 2684
April 6, 2004



Primary

**NICK CORSARO
PATENT EXAMINER**